Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

July 31, 2008

Mary Nichols, Chairperson
California Air Resources Board
1001 I St., P.O. Box 2815
Sacramento, CA 95812

RE: AB 32 Draft Scoping Plan General Comments

Dear Chairperson Nichols and Members of the Board:

The Union of Concerned Scientists (UCS) is the leading science-based nonprofit working for a healthy environment and a safer world. UCS combines independent scientific research and citizen action to develop innovative, practical solutions and to secure responsible changes in government policy, corporate practices, and consumer choices.

UCS applauds the California Air Resources Board (CARB) for developing the nation's most comprehensive plan to date for reducing the pollution that causes global warming. While the plan is still a proposal, it represents the furthest step forward any state has taken in the fight against global warming. Many of the plan's policies will save consumers money and yield economic benefits. California is showing the rest of the country how to build a clean energy economy—creating jobs and using energy more efficiently, while at the same time protecting the environment and public health.

In particular, UCS is pleased to see that CARB recommends increasing the state's renewable electricity standard and cleaning up diesel engines. The Plan also indicates that CARB is considering a feebates program for cars and trucks that would provide incentives to consumers to buy, and manufacturers to make cleaner cars. We urge CARB to adopt feebates as a recommended measure and keep its recommendation for more renewables.

The plan contains provisions for a state and possible region-wide cap-and-trade program that would work together with other regulations to reduce global warming pollution. The plan appropriately recognizes that cap-and-trade is not a silver bullet; cap and trade accounts for 20 percent of the needed reductions, while the remaining 80 percent will come from direct regulations. UCS has significant concerns with two important cap-and-trade design elements: insufficient auctioning of pollution allowances and the overuse of compliance offsets.

The draft Scoping Plan implies that the agency is considering auctioning less than half of the pollution allowances under a cap-and-trade system initially. Yet cap-and-trade systems work best when as many pollution allowances as possible are auctioned. Giving them away can create windfall profits for polluters and reduce opportunities to use auction revenue for investments in consumer protection and emission reduction efforts that fall outside the reach of the cap.

The draft plan suggests a too large a role for compliance offsets in AB 32 implementation. The suggestion that firms regulated under a cap-and-trade system could cover up to 10 percent of their emissions through offsets creates the disconcerting possibility that cap-and-trade would fail to produce any reductions in the capped sectors that are the program's primary target. Moreover, the draft plan proposes no geographic limits or other means to prioritize projects in California, creating the likelihood that some emission reduction projects would be outsourced under the proposed approach to offsets. This would be a missed opportunity and counter to AB 32's call for benefit maximization for the people of California. Carefully designed limits on offsets are important to construction of an effective cap-and-trade program and will promote investment in clean air, clean energy and greater energy security in California.

Below are more specific comments and recommendations on 33 percent renewable energy standard, diesel standards, feebates, and cap-and-trade design.

I. Strong Support for the 33 Percent Renewable Portfolio Standard

UCS applauds the draft Scoping Plan's endorsement of a 33 percent by 2020 statewide Renewables Portfolio Standard (RPS), and urges CARB to keep the 33 percent RPS in the final AB 32 Scoping Plan.

The passage of AB 32 underscores the need for policy measures that will provide substantial in-state GHG reductions. A 33 percent RPS is not only consistent with our AB 32 goal, but will bring significant co-benefits to the state. These benefits include reducing air pollutants that harm public health, solidifying California's role as a leader in renewable energy development, invigorating the state's booming clean tech investment community, and creating a new source of "green collar" jobs. A 33 percent RPS will also put the electricity sector on the path to achieving the much deeper emission reductions required beyond 2020.

While a global warming cap-and-trade program may encourage some additional investment in renewable resources, a higher RPS mandate is essential to drive the changes in government policy, utility practices, and industry investment that are necessary to overcome the transmission, siting, and other market barriers to developing renewable energy in the state. In addition, a 33 percent RPS will provide a clear and long-term signal to the financial community to continue supporting infrastructure investments that will significantly increase the amount of renewable generation serving California. Achieving much higher levels of renewables will not happen organically – it requires a strengthened RPS policy that includes both a higher renewables mandate and statutory and regulatory reforms to encourage more renewables development.

The draft Scoping Plan's endorsement of the 33 percent RPS is also entirely consistent with California's existing policy goals. In 2005, the Energy Action Plan II (EAP II) reinforced the Governor's stated goal of achieving 33 percent of electricity sales from renewable energy by 2020.[1] Similarly, the California Public Utilities Commission (CPUC) instructed the state's three investor-owned utilities to identify planning decisions that must be made within their

[1] *See* CEC/CPUC Energy Action Plan II, September 21, 2005, p. 6.

2006 long-term procurement plans to achieve 33 percent renewables by 2020.[2] Since then, the California Energy Commission (CEC), the CPUC, the California Independent System Operator (CAISO), and several federal agencies have undertaken studies and workshops to resolve the transmission, permitting, and grid reliability issues that must be overcome to achieve significantly higher levels of renewable energy.

We acknowledge that reaching a 33 percent renewable energy goal by 2020 is a tremendous challenge that will require unprecedented coordination among state agencies, policymakers, and stakeholders. UCS is committed to working diligently with these parties to help identify and overcome the barriers to increasing renewable energy in California. We are working with the Legislature to establish effective 33 percent RPS legislation that will benefit California consumers, stimulate economic activity within the state, and help California to achieve the goals of AB 32.

We commend CARB for its leadership in advancing clean energy to meet the goals of AB 32, and strongly support the inclusion of a 33 percent RPS for all load serving entities (LSEs) in the final Scoping Plan. If necessary, we suggest that CARB make an explicit plea to the legislature to amend the existing RPS statute to reflect the 33% recommendation in the Scoping Plan

II. Diesel Standards and Goods Movement

We commend CARB for focusing attention on the goods movement sector for both early emission reductions and long-term global warming reductions from heavy-duty trucks, ships, and trains. Strategies that reduce global warming pollution from this sector can also provide substantial co-benefit emission reductions of NOx and particulate matter (PM), bringing significant public health benefits.

As noted in the staff analysis, heavy-duty trucks alone account for about 20 percent of all transportation related global warming emissions. CARB is moving forward with an early action measure targeting a subset of this truck population with requirements for improved aerodynamics and rolling resistance. Additional measures identified in the plan target hybrid technology and engine efficiency improvements separately. These measures will result in more efficient and lower emitting truck transport in California. However, this approach may fail to capture the full potential of technology advancements for heavy-duty trucks. Overall truck efficiency and global warming emissions are a combination of aerodynamic drag, rolling resistance, engine, and drive train efficiency. CARB should consider setting a global warming standard for new trucks that accounts for total truck performance in addition to component efficiency.

Improvement in the goods movement system as a whole will also be critical to meeting our 2020 and 2050 climate goals given the rapid growth in freight that is expected in the coming decades. Both efficiency measures and advanced technology solutions will be needed to meet these challenges. We support CARB carrying out a full assessment of emissions sources and

[2] *See* CPUC Scoping Ruling for R.06-02-013, September 25, 2006, p. 20.

reduction strategies for the state's transportation corridors, ports, and railyards. The focus on ports and railyards is especially important given the potential of complimentary strategies to reduce toxic emissions and global warming pollution. Emission reduction plans for these facilities must be enforceable to ensure that progress is being made towards a lower carbon and less polluting goods movement system in California.

III. Include Feebates as a Recommended Measure

UCS urges CARB to move feebates from a "Measure Under Evaluation" to a "Recommended Greenhouse Gas Reduction Measure" in the transportation sector of the Scoping Plan. Feebates is a powerful, yet flexible incentive program that affects both buyers and makers of automobiles. Economic studies have shown that feebates have the following benefits, which will lead to significant emissions reductions and consumer savings:

- A feebates program can work as a compliment to existing and future global warming regulations. Because a feebates program provides financial incentives for automakers to install clean technology, it motivates automakers to meet California's GHG regulations sooner.
- Feebates can achieve significant emission reductions in the medium duty passenger vehicle fleet, which are not covered by existing global warming regulations. Currently, the auto companies do not have any requirements to install emission reduction technologies on these vehicles.
- A feebates program will not only encourage automakers to make improvements in their vehicle fleet, but can engage the general public in the battle to combat global warming by offering direct incentives for consumers to make choices that help the environment.
- A feebates program is self-financing and, according to the CARB Scoping Plan, provides over a billion dollars in savings due to reduced fuel consumption.

Based upon these benefits and the 2-6 MMTCO2E in emission reductions from a vehicle feebates program, we strongly encourage CARB to adopt feebates as a "Recommended Greenhouse Gas Reduction Measure" and include medium duty passenger vehicles in the program. If necessary, we suggest that CARB make an explicit request to the legislature to authorize CARB to enact a feebates program.

IV. Cap-and-Trade Proposal Needs Strengthening

The draft Scoping Plan provides a strong set of sectoral policies to do much of the "heavy lifting" to reach the state's 2020 and 2050 goals. With approximately 80% of the reduction coming from other measures, the draft Scoping Plan uses a broad cap-and-trade program to sweep up the last increment of reductions and to provide enhanced certainty that the needed economy-wide reductions will be achieved. The draft plan provides a cogent explanation of how sectoral polices can work in harmony with cap-and-trade as part of an economy-wide effort. In this way, the draft Scoping Plan advances the state of the art.

Though cap-and-trade is not a silver bullet, a well designed program could be a useful component in AB 32 implementation. Global warming has been called "the greatest market

failure the world has ever seen" because markets currently ignore the costs imposed by the heat-trapping emissions that arise from our production and consumption choices. A cap-and-trade program would put a price on those emissions. This would "internalize" pollution costs, providing an incentive to find the most effective and affordable solutions for global warming.

We have two major concerns about the proposed cap and trade structure. First, the proposal gives an overly expansive role for compliance offsets, undermining the integrity of the cap and the ability of CA to capitalize on the co-benefits of investment in clean technologies. Second, the proposal does not go nearly far enough with respect to auctioning as a method of distribution for allowances. The draft plan implies that auctioning will start at less than 50 percent.

Need for Effective Limits on Compliance Offsets

The outlines of a cap-and-trade program presented in the draft Scoping Plan are a step in the right direction, but there is substantial room for progress. Our greatest concern stems from the overly expansive role for compliance offsets that the draft plan proposes. The use of compliance offsets should be limited to a small fraction of the emission reductions that the cap and trade program is expected to achieve. Using a "limit" of ten percent of a firm's *total emissions* could allow 100 percent of the reductions from cap and trade to be achieved through offsets.[*] Potentially all of the reductions that cap-and-trade seeks to achieve could be done through offsets, and no emission reductions whatsoever would necessarily occur in capped sectors. This would undermine what should be a guiding principle of cap-and-trade design: the program should yield *meaningful* reductions in capped sectors.

UCS supports a quantitative limit on offsets to be set at no more than 10 percent of estimated reductions from cap and trade. Whereas 10 percent of emissions implies that up to 40 million metric tons of reductions of carbon dioxide equivalent could be achieved through compliance offsets in 2020, a limit of 10 percent of reductions would imply an upper bound of about 3.5 million metric tons of carbon dioxide equivalent for offsets, or about one percent of allowances.

Additionally, though the Scoping Plan suggests that CARB might allow offsets to be used to comply with direct regulations, we urge CARB to state that offsets will not be necessary for compliance with any of the direct regulations included in the Scoping Plan.

Ineffective limits on compliance offsets such as those included in the draft Scoping Plan could lead to large outflows of capital through the outsourcing of emission reduction projects and related losses in economic and environmental benefits for the people of California. In contrast,

[*] The draft Scoping Plan suggests that "a limit on offsets, such as 10 percent of the compliance obligation for an individual firm, would allow [C]ARB and WCI to test the viability of the offsets system while limiting the risk that unconstrained offsets could weaken the stringency of the overall cap-and-trade program" (p.19). The term "compliance obligation" could be interpreted in different ways. CARB has defined compliance obligation as "emissions." The WCI has defined the term as allowances. Because the preliminary 2020 cap level within the cap-and-trade program is 365 MMT of CO_2e (million metric tons of carbon dioxide equivalent) and this determines the quantity of allowances that the program would create—CARB's suggested limit implies that up to 40 MMT of reductions could be achieved through compliance offsets in 2020. Yet the cap-and-trade program is only tasked with achieving 35.2 MMT of reductions in the overall plan.

carefully designed quantitative and geographic limits will demonstrate the benefits of climate action and will allow the Golden State to become a model of climate action, thereby inspiring action throughout the world. Effective limits on compliance offsets will promote:

- Clean air and public health benefits from investments in global warming solutions
- The realization of benefits from clean-tech investments and innovation in key (capped) sectors
- Meaningful reductions in high-emitting capped sectors and avoidance of costly lock-in of long-lived fossil-fuel technology
- The preservation of the option of linkage to other cap-and-trade programs that have chosen to limit offsets.

We provide additional information below on the potential co-benefits of limited offsets. Carefully limited offsets:

- *Provide clean air and public health benefits for residents of California and the West.* While reducing global warming pollution offers valuable climatic benefits in its own right, it will also provide many other important environmental benefits. When electricity providers, oil and gas companies, and other industrial sources reduce the amounts of global warming pollution that they produce, Californians will be exposed to lower levels of conventional smog-forming and toxic air pollutants as well. This improved air quality will in turn lead to better public health, lower health care costs, and higher levels of worker productivity and student performance. If offsets are allowed from anywhere in the world, which would be equivalent to the outsourcing of emission reductions project, then valuable health benefits will be lost.

  At present, Californians are quite literally dying from dirty air. The state has three of the five most polluted air basins in the country and the Los Angeles air basin has the worst year-round small-particulate pollution and the worst ozone levels in the country. CARB estimates that the policies cited in its draft Scoping Plan would reduce nitrogen oxides (NOx) emissions by 50 tons per day and the most dangerous kind of particulate matter by 10 tons per day. These reductions, according to CARB estimates, would result in 340 premature deaths avoided and a range of other public health benefits, with a combined economic value of $1.5–$2.4 billion in 2020. The Natural Resources Defense Council, which recently released its own assessment, concludes that the improvement in air quality and reduction in health care costs would be even larger, preventing more than 700 premature deaths and saving $3.2–$5 billion in 2020.

- *Spur clean-tech investment, green-job development, and innovation.* A 2004 survey of venture capitalists by Environmental Entrepreneurs found that one of the main reasons why they are motivated to invest in California's clean-technology industry is the state's strong climate policies. As a result, that sector is surging. In 2007, California garnered 45 percent of North America's venture capital investment in clean-energy technologies, or $1.8 billion, up from $1 billion in 2006. California last year attracted more venture capital in clean tech than did all of Europe combined. Carefully designed offset limits

will help maintain this momentum, thereby preserving the rates of investment and innovation in California's clean-tech industries that will be the foundation of the future's low-carbon economy.

By contrast, overly permissive offset policies would shift emissions reductions from capped sectors to other sectors or to other geographic areas. Investor expectations on the future profitability of technological advances in the capped sectors would be reduced, thereby depressing investment. Moreover, the learning-by-doing and economies of scale that come with increased utilization would be lost. California's competitive advantage in the rapidly growing clean-tech global market should not be squandered; it makes much more sense to prioritize investment and innovation in clean tech—within the state, as opposed to essentially outsourcing—to take advantage of present opportunities. Another related ancillary benefit that results from progress toward a clean energy future is reduced reliance on imported fossil fuels, greater insulating from volatile oil and gas markets and improved energy security.

- *Ensure meaningful reductions and avoid lock-in to higher-emitting capital.* The broad reach of the cap-and-trade program proposed in the draft Scoping Plan means that almost all fossil-fuel combustion (in transportation, electricity generation, and other industrial activities) will be capped. Carefully designed offset limits promote technological changes in capped sectors by forcing emissions reductions within those sectors instead of diverting the reductions to other sectors of the economy or to other geographic areas. The draft plan recognizes this important objective, stating that "[C]ARB is considering limiting the use of offsets… to help ensure a significant portion of required reductions come from within the state and within the regulated sectors" (p. 44).

  However, the suggested quantitative limit does not square with this objective, as it implies that all of the reductions produced by capped sectors could come through offsets. The draft plan's suggested allowable quantity of offsets (40 MMT) is actually greater than the reductions that the program is designed to achieve (35.2 MMT). With such an offset policy, opportunities for promoting investment in clean technology could be lost, resulting in costly lock-in to high-emitting capital that would make the eventual task of curtailing emissions far more expensive in the short timeframe we have left to avoid dangerous climate change.

- *Preserve the option of linkage* to other cap-and-trade programs that have chosen to limit offsets quantitatively. But linkage is unlikely in the absence of harmonization with those programs' offset policies. The European Union Emission Trading Scheme in particular has signaled its intention to sharply curtail offsets in order to ensure that cap-and-trade provides the necessary impetus for a transition to a clean-energy future.

Support for 100% Auctioning of Allowances

UCS supports 100% auction as the preferred method of distribution for allowances under the cap. This position reflects the principle that the public owns the sky and that the pollution that causes global warming should have a price.

The draft plan does not go nearly far enough with respect to auctioning as a method of distribution for allowances. The draft plan implies that auctioning will start at less than 50 percent. While it suggests that auctioning will increase over time, the draft only commits to achieving a "majority" by auctioning in 2020. UCS recommends auctioning 100% of allowances. At a minimum we would hope that the final Scoping Plan will call for auctioning to be the primary method for distributing allowances from the outset and that it will call for a quick transition to 100% auctioning.

By distributing allowances via auctions, we can:

- *Avoid Windfall Profits to Polluters*
  The allowances created under a tight cap are a valuable, scarce commodity that commands a market price. The European experience under cap-and-trade has shown that free allocation leads to windfall profits in competitive markets.[3] Giving away allowances to covered emitters does not protect consumers from price rises in competitive markets. Electric utilities and other covered emitters in Europe have been able to raise prices to consumers to reflect the market value of the allowances, even though they received them for free. The total value of allowances will far exceed the adjustment costs that business may face, and this is why unfair windfall profits result from giving away allowances. The National Commission on Energy Policy explains how windfall profits can come about: "Economic analysis and experience with Europe's trading system suggests that energy companies can and will pass most program costs through to consumers and businesses at the end of the supply chain. If the same companies get a large allocation of free allowances, the value of those allowances is likely to substantially exceed any actual net costs they incur as a result of the policy."

- *Offer an Efficient Source of Revenue for the Public Benefit*
  Revenue gained from auctioning permits enhances economic efficiency because it is gained by correcting the "externality" that has been associated with the lack of a cost for emitting global warming pollution. The revenues generated by an allowance auction can be used to invest in emission reductions outside of the cap-and-trade program, in particular measures that will assist energy consumers. It is particularly important the lower income households not endure disproportionate impacts, as these are the most economically vulnerable households. CARB lists a number of appropriate possible uses of revenue generated under AB 32 in the draft plan.

[3] Two recent reports have documented and explained the occurrence of windfall profits in the European Union's Emission Trading System. These are: (i) National Commission on Energy Policy, 2007, *Allocating Allowances in a Greenhouse Gas Trading System* (ii) Deutsche Bank Research, March 2007, *EU Emissions Trading: Allocation Battles Intensifying*.

- *Reward Early Action*
  A policy of 100 percent auction will reward those who have taken early action to reduce their emissions. Businesses that create less global warming pollution per unit of production would have to purchase fewer allowances, placing them at a competitive advantage. By contrast, a system that allocates free allowances based on emissions could fail to reward these "good" actors.

- *Create a Level Playing Field*
  Auctions allow new firms entering the market to compete on a fair and equivalent basis with existing firms, with the same access to allowances.

- *Help Create Administrative Simplicity and Lower Transactions Costs*
  Allocating allowances for free would set in motion a time-consuming and costly process of lobbying and negotiation over which businesses, institutions, and individuals would get how many allowances.

- *Support a Transparent, Well-functioning Market and Price Discovery*
  The auction of allowances is an effective way to provide clear, timely information about the market value of these allowances, which helps firms make informed decisions about future production and investments. Moreover, auctioning should contribute to lower price volatility. Suppliers of allowances (those who may have received or purchased excess allowances) can be late in entering the market, or they may simply hold onto their excess allowances as a hedge against the possibility that allowance prices might rise in the future. On the other hand, those who need to buy allowances (the "demanders") would tend to enter the market first and place an immediate value on allowances. This can quickly create a price spike due to a mismatch in market information. Once suppliers see the high price, they may enter the market in large numbers, causing a price crash. This kind of scenario and the resultant price volatility have been observed in the EU ETS context. Price stability and early price discovery will be important to developing a successful, smoothly operating market.

The design of a California cap-and-trade program can benefit from lessons learned from the experiences of other similar programs. When the European Union launched its Emissions Trading System in 2005, virtually all the allowances were distributed for free. In the U.K., this lead to electric power generators reaping windfall gains of about $2.5 billion in 2005. A World Wildlife Fund report estimates that in Germany windfall profits in the electricity sector will range from $46 billion to $94 billion by 2012. In contrast, as ten states in the U.S. Northeast prepare to launch the Regional Greenhouse Gas Initiative (RGGI) in January 2009, almost every state that has decided how to distribute allowances under the program has wisely opted for 100 percent auctioning of emission allowances. The minimum amount of auctioning that will occur under RGGI is 90% in Maryland.

Free allocation does not dampen price effects; auctioning does not increase allowance prices. The European experience with emission trading has shown that regulated entities will pass

along the value of an allowance, the opportunity cost of not selling it, when possible regardless of how it was acquired. Allowance prices will reflect the number of allowances and the underlying demand for allowances, which in turn will reflect the relative ease of making reductions. And it is this allowance price that is independent of the method of allocation that will determine the opportunity cost associated with using a permit. How to understand this intuitively? Consider the cost of a ticket to the World Series. Would you expect a scalper to sell a ticket to you for a lower price if s/he got it for free? Almost certainly not. Therefore, the public interest will be served by auctioning allowances and using this revenue for the benefit of consumers.

UCS supports 100% auction in the electricity sector, which is a patchwork of publicly or consumer-owned utilities and investor-owned utilities operating under cost-of-service regulation. Auction revenue can be substantially returned to consumers via the utility that serves them for investments in efficiency and other investments that reduce the pollution that causes global warming. NRDC/UCS have conceptualized a "use it or lose it" approach to revenue recycling that returns some auction revenue to the service area from which it originated, thereby avoiding geographic wealth transfers.

Scope

UCS supports a broad cap-and-trade program including transportation fuels from the start. There are at least four advantages to a broad scope for cap-and-trade that includes transportation fuels.

- It extends a hard cap across a much larger part of the economy.
- The price response increases over time and is significant in the long run.
- A larger market with more actors will be more resistant to attempted manipulation.
- Encourages efficiency via a consistent price signal across all high emitting sectors.

- *Creates a specific quantitative cap for a key sector*
  An advantage of including transportation fuels is that it extends a hard cap to this important sector. This feature can be contrasted with other policies that can improve energy intensity but do not guarantee a particular level of reductions.

- *Provides the right long run incentives*
  The long-term price response can be expected to be significant. In a recent working paper that he submitted to the WCI, UC Berkeley Professor Lee Friedman makes the point that with the increasing availability of alternate fuels, both the long run and short run elasticity should increase over historical experience. We add that the addition of public transit options would have the same effect, making it easier for people to change their behavior in response to a change in prices. In the long run, including transport fuels can play a useful role in contributing to smart growth. In this way, including transportation fuels can contribute to putting us on a path to meeting our long run objectives. 2020 is an arbitrary milestone along in a longer journey toward much deeper reductions. Moreover, including transportation in cap-and-trade program early

on when the reductions are more modest could help keep costs relatively low in these initial years.

- *Creates a more secure market*
  The larger market would make market manipulation more difficult as more players and more allowances would be involved.

- *Efficient investment across sectors.*
  As the Cal EPA Market Advisory Committee (MAC) observed, a program with comprehensive coverage of all major emitters will send a price signals across all relevant sectors of the economy. This will encourage efficient investment decisions. There is also an element of fairness in equal treatment (i.e. inclusion) of all high emitting sectors.

Though we present these arguments for including transportation fuels, we cannot emphasize strongly enough that the most cost effective strategy for achieving significant emissions reductions will combine inclusion of the transportation sector in a cap and trade program and complementary policies such as low carbon fuel standards, light duty vehicle efficiency standards, heavy duty efficiency improvements, anti-idling enforcement, alternative fuel promotion, and specific smart growth policies.

Cap Level within Cap-and-Trade

The draft offers a preliminary recommendation for the 2020 cap level: 365 MMT for capped sectors. Our initial assessment suggests that such a cap level would provide a good foundation for achieving AB 32's mandated reductions for the economy as a whole. We urge CARB to ensure that the initial 2012 cap is set below 2012 BAU projections and is based on emission levels in some year prior to 2008. Given problems of over-allocation in previous cap-and-trade programs (RECLAIM, EU ETS Phase 1, possibly RGGI), this is a crucial decision.

The proposal from the WCI recommends that the level of the cap for the first compliance period be set at the level of emissions expected in 2012 under a business as usual scenario, meaning that capped entities could avoid any emission reductions through 2012. This raises great concerns. The path to the 2020 reductions will be smoothed by getting started on the task as early as possible. There is no time to waste.

V. Cumulative Impacts

UCS is pleased that the draft Scoping Plan commits to analyze all of the measures in the plan for impacts they will have on air pollution and public health (ES-2, 4, p.10). We look forward to seeing the results of those analyses and any subsequent revisions made to the plan based on the results.

Before the Scoping Plan is finalized, we encourage CARB to do the following:

- Assess, as accurately as possible, the co-pollutant increases or decreases associated with the five scenarios that have thus far been the subject of economic modeling. Based on

these assessments, estimate the statewide and, to the extent feasible, local health impacts that may occur as a result for each of the five scenarios. We concur with the EJ Advisory Committee recommendation that outside health experts should be consulted to assist with the assessment of health impacts.

- Determine, as accurately as possible, the co-pollutants changes and resulting health impacts associated with each policy under consideration for the Scoping Plan (as would be required for determining cost-effectiveness). Use this information to determine how impacts would differ amongst mixes of policy choices.

- State in the Scoping Plan how CARB plans to accomplish the more detailed screenings that are required for each proposed regulation and market mechanism before it is implemented. (These screenings are spelled out in Health and Safety Code 38562 (b) (1-9) and 38570 (b) (1-3) and include not disproportionately impacting low-income communities, not interfering with achieving air quality standards, maximizing total benefits to California, etc.).

- State in the Scoping Plan that analytical tools and data sets needed will be updated periodically in consultation with outside experts and the EJ Advisory Committee.

- Clearly state in the Scoping Plan that no regulation or market mechanism included in the Scoping Plan will be implemented unless it has undergone the aforementioned screenings and meets the requirements established in 38562 (b) (1-9) and 38570 (b) (1-3).

Cumulative Impacts Screenings

CARB should conduct a cumulative impacts assessment to identify geographic areas that *currently* bear a higher pollution burden using the best available data and tools, including the Cumulative Impacts Screening Tool being developed by a team of university researchers in conjunction with CARB. This will give CARB a snapshot of communities that will need to be protected from potential increases in pollution due to future implementation of climate policies. Such a screening is only a first step in the design of state climate policies. CARB should use currently available information to identify communities with a higher pollution burden prior to the completion of the Scoping Plan.

Additional cumulative impacts screenings for the areas identified in an initial screening as disproportionately burdened communities--using a new tool or an adaptation of an existing tool that can extrapolate the future impacts of a *proposed* policy or set of policies-- will need to be conducted before any regulations are implemented. These screenings should inform decisions about which climate policies are implemented and how such policies are designed to assure that already-burdened communities will not be impacted by increases in pollution.

VI. Incentives for Expansion of the Voluntary Renewables Market

UCS supports an "off-the-top" rule similar to that included in RGGI to ensure that voluntary renewable energy generation and purchases will result in global warming emission reductions.

We support the proposal put forth by CEERT and CRS on this topic: "With this approach, providers of voluntary renewable energy products (such as utilities with voluntary green pricing programs, competitive marketers of renewable electricity or RECs, individuals and organizations who generate some or all of their own electricity demand using onsite renewable generation technologies) will notify the Program Administrator of their projected voluntary demand for the upcoming year. The Program Administrators will convert the MWh sales projection to tons avoided carbon dioxide and remove this quantity of allowances from the entire pool available. Each year, parties providing voluntary renewable energy would document their actual sales or generation and the Program Administrator would retire a commensurate amount of allowances. At the end of the allowance compliance period, any difference between projected renewable energy sales and actual renewable energy sales would be trued up. As the market for renewable energy is a regional and national market, each state should adopt consistent policies in order to not create barriers or market anomalies that reduce the incentive for the development of new renewable energy facilities. There should be no caps on the amount of allowances available for the voluntary renewable market."

VII. Reporting, Monitoring, and Enforcement

While we understand that the Scoping Plan development process is a large undertaking and in this context it is reasonable to expect that some details will remain undecided, the extent to which the cap-and-trade program does its job will depend on many specific yet to be decided with respect to enforcement, monitoring, and how AB 32's "no back sliding" provisions for market mechanisms will be guaranteed. These are just a few important areas where much more work needs to be done.

Finally, because of the magnitude of the emissions reductions called for under AB 32 and the varying levels of certainty attributable to each emissions reduction program, we call on CARB to develop a total set of emission reduction programs that will reach the AB 32 cap while taking into account that possibility that some programs may fall short as to their expectations. The broad scope of the proposed cap-and-trade program reduces the risk in this regard. Nonetheless, CARB should address the role of uncertainty and how unexpectedly high emissions in uncapped sectors such as forestry and agriculture would be managed.

In summary, we commend CARB for its tremendous effort implementing AB 32. We welcome the opportunity to work together as this extremely important and cutting edge work on global warming proceeds. Please don't hesitate to contact us on any of the matters discussed in these comments.

Sincerely,

Erin Rogers
California Climate Program

cc: CARB Board Members

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